WHAT IS CLAIMED IS:

1.   A method for configuring a headless device, comprising:

sending, by a self-initiated configuration mechanism in a headless device, a configure service request to a configuration service mechanism across network, the service request asking for a configuration specification corresponding to the headless device;

returning, by the configuration service mechanism, the configuration specification to the self-initiated configuration mechanism; and

configure, by the self-initiated configuration mechanism, the headless device according to the configuration specification received from the configuration service mechanism.

2.   The method according to claim 1, further comprising:

registering the headless device, prior to the sending, with the configuration service mechanism using a device identification of the headless device.

3.   The method according to claim 2, wherein the registering comprises:

receiving, by the configuration service mechanism from a configuration specification set-up mechanism, a request to set up the configuration specification of the headless device, the request including the device identification;

recording the device identification of the headless device to register the headless device; and

storing the configuration specification of the headless device.

4.   The method according to claim 3, wherein the sending comprises:

requesting, if an address for a server, which manages allocation of routable addresses across network, can be retrieved from the self-initiated configuration mechanism, a routable address from the server;

selecting, if the address for the server can not be retrieved from the self-initiated configuration mechanism, a routable address from at least one alternative routable address stored in the self-initiated configuration mechanism; and

- 17 -

requesting the configuration configuration from the configuration service mechanism using the device identification, that is to be used to identify the configuration specification, and the routable address, to where the configuration specification of the headless device is to be returned.

5.   The method according to claim 4, wherein the returning comprises:

receiving the configuration service request with the device identification and the routable address;

retrieving the configuration specification based on the device identification; and

sending the configuration specification, retrieved by the retrieving, to the routable address.

6.   The method according to claim 5, further comprising:

receiving a request to update the existing configuration specification of a headless device, the request including a device identification of the headless device; and

updating the existing configuration specification of the headless device according to the request to generate updated configuration specification; and

replacing the existing configuration specification with the updated configuration specification.

7.   A method for a self-initiated configuration mechanism, comprising:

determining a routable address;

requesting a configuration service mechanism to retrieve a configuration specification of a headless device, in which the self-initiated configuration mechanism resides, using a device identification of the headless device and to send the configuration specification to the routable address;

receiving the configuration specification, retrieved using a device identification and sent from the configuration service mechanism to the routable address; and

configuring the headless device according to the configuration specification.

8.   The method according to claim 7, wherein the determining comprises:

requesting, if an address of a server, which manages allocation of routable addresses, can be retrieved from the self-initiated configuration mechanism, the routable address from the server; and

selecting, if the address for the server can not be retrieved from the self-initiated configuration mechanism, the routable address from at least one alternative routable address stored in the self-initiated configuration mechanism.

9.   The method according to claim 8, wherein the receiving comprises:

activating a time out mechanism that enforces a time out control according to a time out condition, the time out condition defining a length of time;

if the configuration specification is not received within the length of time and if the routable address is determined by the selecting, returning to the selecting; and

if the configuration specification is not received within the length of time and if the routable address is determined by the server, returning to the requesting the configuration specification.

10.   A method for a configuration service, comprising:

receiving a request from a headless device with a device identification associated with the headless device;

initializing a configuration specification of the headless device, if the request requests to set up an initial configuration specification of the headless device with the configuration service;

updating the configuration specification of the headless device, if the request requests to update the current configuration specification of the headless device; and

forwarding the configuration specification of the headless device to a routable address received with the request, if the request requests a configuration service.

11.   The method according to claim 10, wherein the initializing comprises:

registering the headless device using the device identification;

setting up the initial configuration specification of the headless device; and

storing the initial configuration specification of the headless device as the current configuration specification of the headless device.

12.   The method according to claim 11, wherein the updating comprises:

updating the current configuration specification of the headless device to generate an updated configuration specification of the headless device; and

replacing the current configuration specification with the updated configuration specification.

13.   The method according to claim 12, wherein the forwarding comprises:

retrieving the configuration specification of the headless device using the device identification; and

sending the configuration specification, retrieved by the retrieving, to the routable address.

14.   An arrangement for configuring a headless device, comprising:

a network adapted to receive connection to the headless device; and

a configuration service mechanism connecting to the headless device via the network for providing configuration service to the headless device.

15.   The mechanism according to claim 14, wherein the headless device comprises:

a communication mechanism for perform communications across the network; and

a self-initiated configuration mechanism for configuring the headless device using a configuration specification that is set up for the headless device in the configuration service mechanism and received, upon a request, from the configuration service mechanism via the communication mechanism.

16.   The mechanism according to claim 15, further comprising:

a configuration specification set up mechanism connecting to the configuration service mechanism via the network for setting up the configuration specification of the at least one

headless device, the setting up including initializing a configuration specification of a headless device when the headless device is initially registered with the configuration service meahcnism and updating the configuration specification of a headless device that is previously registered with the configuration service mechanism.

17.   A headless device, comprising:

a communication mechanism for performing communications; and

a self-initiated configuration mechanism for configuring the headless device via a configuration service mechanism through the communication mechanism.

18.   The device according to claim 17, wherein the self-initiated configuration mechanism comprises:

a routable address determination mechanism for determining a routable address to where the configuration service mechanism sends the configuration specification of the headless device;

a configuration specification retrieval mechanism for retrieving the configuration specification from the configuration service mechanism using a device identification, associated with the headless device, and the routable address; and

a configuration set up mechanism for configuring the headless device based on the configuration specification received from the configuration service mechanism.

19.   The device according to claim 18, wherein the routable address determination mechanism comprises:

a dynamic host configuration protocol based routable address determination mechanism for obtaining the routable address from a dynamic host configuration protocol server; and

an alternative routable address selection mechanism for selecting the routable address from at least one alternative routable address stored in the self-initiated configuration mechanism.

20. The device according to claim 18, wherein the configuration specification retrieval mechanism comprises:

a request initiation mechanism for initiating a request to the configuration service mechanism to retrieve the configuration specification based on the device identification, the request being sent with the device identification and the routable address, to where the retrieved configuration specification is sent; and

a receiver for receiving, after the request is sent, the configuration specification from the configuration service mechanism.

21. The mechanism according to claim 20, further comprising:

a time out mechanism for controlling the receiver to receive the configuration specification within a length of time determined according to a time out condition.

22. A configuration service mechanism, comprising:

a registeration mechanism for registering a headless device with an initial configuration specification using a device identification corresponding to the headless device;

an on-line configuration mechanism for providing configuration service to a headless device by retrieving and sending, upon a request, the configuration specification of a registered headless device to a specified routable address; and

an updating mechanism for facilitating the update of the configuration specification of a registered headless device.

23. The mechanism according to claim 22, further comprising:

a network communication mechanism for performing communications; and

a configuration specification storage for storing the configuration specification of a headless device, the configuration specification being accessed based on the device identification of the headless device.

24.   A computer-readable medium encoded with a program for configuring a headless device, the program causing, when executed:

sending, by a self-initiated configuration mechanism in a headless device, a configure service request to a configuration service mechanism across network, the service request asking for a configuration specification corresponding to the headless device;

returning, by the configuration service mechanism, the configuration specification to the self-initiated configuration mechanism; and

configure, by the self-initiated configuration mechanism, the headless device according to the configuration specification received from the configuration service mechanism.

25.   The medium according to claim 24, wherein the program further causes, when executed:

receiving, prior to the sending, a request to register the headless device and its corresponding configuration specification using a device identification sent with the request;

recording the device identification of the headless device; and

storing the configuration specification of the headless device.

26.   The medium according to claim 24, wherein the returning comprises:

receiving the configuration service request with a device identification and a routable address;

retrieving the configuration specification based on the device identification; and

sending the configuration specification, retrieved by the retrieving, to the routable address.

27.   A computer-readable medium encoded with a program for self-initiated configuration, the program causing, when executed:

determining a routable address;

requesting a configuration service mechanism to retrieve a configuration specification of a headless device according to a device identification of the headless device and to send the configuration specification to the routable address;

receiving the configuration specification, retrieved using a device identification and sent from the configuration service mechanism to the routable address; and

configuring the headless device according to the configuration specification.

28.   The medium according to claim 27, wherein the determining comprises:

requesting, if an address of a server, which manages allocation of routable addresses, is stored in the headless device, the routable address from the server; and

selecting, if the address for the server is not stored in the headless device, the routable address from at least one alternative routable address stored in the headless device.

29.   A computer-readable medium encoded with a program for a configuration service, the program causing, when executed:

receiving a request from a headless device with a device identification associated with the headless device;

initializing a configuration specification of the headless device, if the request requests to set up an initial configuration specification of the headless device with the configuration service;

forwarding the configuration specification of the headless device to a routable address received with the request, if the request requests a configuration service.

30.   The medium according to claim 29, wherein the program further causes, when executed:

updating the configuration specification of the headless device, if the request requests to update the current configuration specification of the headless device.